

PATENT COOPERATION TREATY
PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference W2214-000000	FOR FURTHER ACTION	
		See Form PCT/IPEA/416
International application No. PCT/JP2005/001832	International filing date (<i>day/month/year</i>) 08.02.2005	Priority date (<i>day/month/year</i>) 09.02.2004
International Patent Classification (IPC) or national classification and IPC D03D15/12 (2006.01), B29B11/16 (2006.01), D03D11/00 (2006.01) B29K105/10 (2006.01)		
Applicant ASAHI-SCHWEBEL CO., LTD.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: <ul style="list-style-type: none"> a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 1 sheets, as follows: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/001832

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following _____, which is the language of a translation furnished for the purposes of:

 - international search (Rule 12.3 and 23.1(b))
 - publication of the international application (Rule 12.4)
 - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished
 the description:
 pages 1-17, 19 as originally filed/furnished
 pages* 18 received by this Authority on 30.11.2005
 pages* _____ received by this Authority on _____
 the claims:
 nos. 1-8 as originally filed/furnished
 nos.* _____ as amended (together with any statement) under Article 19
 nos.* _____ received by this Authority on _____
 nos.* _____ received by this Authority on _____
 the drawings:
 sheets 1, 2 as originally filed/furnished
 sheets* _____ received by this Authority on _____
 sheets* _____ received by this Authority on _____
 a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____
4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/001832

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1–8	YES
	Claims	_____	NO
Inventive step (IS)	Claims	_____	YES
	Claims	1–8	NO
Industrial applicability (IA)	Claims	1–8	YES
	Claims	_____	NO

2. Citations and explanations (Rule 70.7)

Document 1: JP 56-58024 A claim 1, page 2, upper left column, lines 9 to 20; page 2, upper right column, lines 13 to 18; fig. 1

Document 2: JP 2001-55642 A, claim 1, paragraph [0002]

Claims 1 to 8

Documents 1 and 2

The inventions set forth in claims 1 to 8 do not involve an inventive step in the light of documents 1 and 2 cited in the international search report.

Document 1 sets forth a fiber material for fiber-reinforced resin, having a bilayer structure comprising a back side structure and a face side structure in which reinforcing fibers are used, and said back side structure and face side structure have their fiber structures interconnected to form an integrated body (claim 1, page 2, upper left column, lines 9 to 20). In addition, glass fiber is disclosed as the aforementioned fiber (page 2, upper right column, lines 13 to 18), and a plain weave is disclosed as the structure of the fabric (page 2, upper left column, lines 9 to 20).

It is a known technique to use a fiber material for fiber-reinforced resin as a material for printed circuit

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITYInternational application No.
PCT/JP2005/001832**Box No. V** **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

boards (see document 2, if necessary).

In addition, document 2 sets forth a production method wherein prepreg comprising glassfiber impregnated with resin in a semi-hardened state is laminated, a metal foil such as copper foil is overlaid on both sides, and this is heated under pressure to harden the resin (paragraph [0002]). It would be easy for a person skilled in the art to employ said method when using the fiber material set forth in document 1 for printed circuit boards.

Moreover, after hardening the resin, preparing a circuit pattern and forming through-holes is merely the application of known techniques.